

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY RESEARCH TRIANGLE PARK, NC 27711

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OAQPS AIR DOCKET CONTROL ROOM OFFICE OF AIR QUALITY PLANNING AND STANDARDS

Mr. Stephen McNally Director of Government Affairs Composites Fabricators Association 1655 North Fort Myer Drive, Suite 510 Arlington, Virginia 22209

This is in response to your letter of November 11, 1997 regarding the incorporation of a controlled spray program in the maximum achievable control technology (MACT) standard for reinforced plastic composites manufacturing. After discussion with our staffs, we have concluded that the controlled spray program cannot be used as an option to offset or reduce the MACT floor level of emissions control to be determined by your proposed averaging concept. The remainder of this letter provides the rationale for our conclusion, addresses several points raised in your letter, and presents a proposal for promoting the concept of better spraying practices in the standard.

The controlled spray program was designed by industry to minimize spraying emissions by using better spray practices. It was presented as part of the averaging approach that you and other industry representatives proposed for determining the MACT floor and establishing compliance with the MACT standard. You proposed a 0.77 emission reduction factor be applied to the averaging approach for those facilities choosing to adopt a controlled spray program. This would offset one or more control options in the standard currently under consideration, such as material specifications on the resin, equipment specifications for the application technique, and/or abatement equipment. The reasons we concluded that the controlled spray program cannot be traded with the other options are that the program is considerably more difficult to enforce and cannot be assured to achieve quantifiable and continuous emission reductions.

With regard to enforceability and continuous compliance, the program does not contain objective parameters which would allow a person to distinguish between a facility that is performing (that is, achieving the reductions associated with) controlled spraying and one that is not. For example, establishing the lowest pressure setting that provides an adequate fan pattern is subjective. Further, it is not only pressure setting that affects the fan pattern, but materials, tip size, catalyst ratio, and perhaps even other parameters that would make it difficult for enforcement personnel to objectively determine compliance with the MACT standard. The photographic images suggested in your letter would aid in the demonstration that the pressure setting procedure was carried out; however, they would not guarantee that the lowest pressure setting that provides an adequate fan pattern was found. Issues arise in other parts of the

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program as well, such as the verification of proper operator technique. A flange could well limit the spray on some molds, but for convex and complicated shapes, it would not guard against spraying past the mold perimeter. Imagine a hemisphere-shaped mold, for example. A flange on the edge of the mold will not guard against the operator spraying over the top or past the right or left side of the mold. Even with parts where the flange will serve as a guard, there is no procedure that assures continuous compliance, i.e., that the operator is always spraying within the flange distances.

Your letter indicated that there was close agreement in the results of the controlled spray testing done by the Composites Fabricators Association (CFA) and the Research Triangle Institute (RTI) under cooperation with the Environmental Protection Agency (EPA). Our analysis of the results indicates that the agreement was not as stated in your letter. For the gel coat operation tested, RTI achieved a 9 percent reduction in emissions in terms of percent available styrene (%AS) for a high air velocity situation and a 17 percent reduction for a low air velocity situation, as compared to the CFA's result of 42 percent reduction in %AS emissions. For the resin operation, RTI achieved a 36 percent emission reduction of %AS emissions as compared to the CFA's result of 20 percent emission reduction in %AS emissions. These results are not in close agreement; however, they do indicate that spray technique influences the amount of emissions that result from polyester resin spray operations. This has been a longstanding point of agreement between the EPA and industry representatives.

The EPA recognizes controlled spraying as a best management pollution control practice. The operation of an emission source in a manner consistent with good air pollution practice is required by Subpart A of Part 63 (which applies to all MACT standards). In particular, under Section 63.6(e)(1)(i), "At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards." To encourage sources to use controlled spraying techniques, we are considering inclusion of a requirement for an operator training program that addresses better spraying practices in the MACT standard. This requirement would be consistent with the provision of Section 63.6(e)(1)(i). A facility could demonstrate compliance by keeping records of its training program and records demonstrating that operators applying resin have taken this training. This concept was incorporated in Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. The training program (and other work practices) was required in addition to emission limitations, equipment standards, and material requirements. Your efforts on the controlled spray program would be valuable to facilities that choose to expand upon or develop new operator training programs to meet such a requirement, if established.

In summary, we support encouraging better spray practices with the standard, but we do not plan to allow them to be used to offset the other emission reduction techniques that were used in determining the level of the MACT standard. Due to the lack of enforceability of the program designed by the industry, it cannot be used to generate credits which would be traded with the

other emission reduction techniques to meet the MACT standard. Our current thinking is to add a requirement for operator training which would encourage better spray practices. We appreciate your efforts to develop a program to promote better spray practices and your ongoing work to make your members aware of the importance of operator technique on reducing emissions.

Sincerely,

Bruce Jordan

Director

Emission Standards Division

John B. Rasnic

Director

Manufacturing, Energy, and Transportation Division Office of Compliance